

INTRODUCTION

The Metropolitan Transportation Commission (MTC) *2001 Regional Bicycle Plan* is a component of the *2001 Regional Transportation Plan for the San Francisco Bay Area*. It represents the combined efforts of MTC staff, the Regional Bicycle Plan Oversight Committee, local agencies, advocacy groups, and countless dedicated citizens in the Bay Area. This plan is regional in focus and concentrates on broader policies and programs, deferring to local decision-makers on specific routes and facilities. MTC had five main objectives in developing a regional bicycle plan:

- To define a network of regionally significant bicycle routes, facilities, and necessary support programs;
- Identify gaps in the network and recommend specific improvements needed to fill these gaps in the system;
- Develop cost estimates for build-out of the entire regional network;
- Develop a funding strategy to implement the regional bicycle network; and
- Identify programs to help local jurisdictions to become more bicycle-friendly.

To successfully achieve these objectives, MTC convened an Oversight Committee to guide the development of the plan. This partnership approach ensured that representatives from a variety of stakeholder groups with different areas of expertise could provide input and guidance. Representatives came from a range of organizations, including regional government agencies such as the Bay Area Air Quality Management District, the Association of Bay Area Governments and Caltrans; and local organizations such as county congestion management agencies (CMAs), transit operators, local cities, and bicycle advocacy organizations. This diverse committee provided valuable insight and information for developing the network and assisted staff on public outreach as the plan developed. The charge to the committee was to review the work products for the plan and make recommendations on policies, network facilities, public outreach strategies, and a toolkit for local jurisdictions.

PUBLIC INVOLVEMENT

There were two rounds of public outreach as well as, a series of meetings with bicycle advisory committees (BACs) in each county, and ongoing meetings of the Bicycle Plan Oversight Committee. The first round of outreach sought to determine what cyclists and the general public saw as high priorities for improving conditions for cyclists in the Bay Area, identify barriers and constraints to cycling, and determine which criteria were most appropriate for selecting regional facilities.



Mapping discussion during the first public workshop in San Francisco

During the first round of outreach, there were two workshops for the general public hosted in San Francisco and Oakland. Outreach meetings also were held with each of the county bicycle advisory committees (BAC). In addition, a survey was distributed at the public workshops, BAC meetings, and over the MTC Web page. Over 200 responses were received.

During the second round of outreach, MTC sought input on the defined regional bicycle network that was developed and the draft policies and support programs. These workshops were held in San Jose, Oakland, Fairfax, and San Francisco. The plan was adjusted to reflect public comment from these meetings. Finally, MTC staff worked with the various Partnership and citizen advisory committees at MTC to obtain more direction and feedback.

"Motor vehicles emit more than 50 percent of the ozone-forming compounds and over 70 percent of the carbon monoxide in the Bay Area. Automobiles are the single largest source of air pollution."
-Bay Area Air Quality Management District

The result of the Oversight Committee meetings, workshops, and other outreach efforts is the following plan.

WHY HAVE A REGIONAL BICYCLE PLAN?

The need for more transportation options is greater than ever. MTC forecasts a 30 percent increase in trips from about 20 million to 26 million daily trips by the year 2025. Furthermore, from 1995 to 2000 vehicle miles traveled in the Bay Area increased at nearly twice the rate of the population increase. Bay Area residents clearly need more transportation alternatives to meet this increasing travel demand – alternatives that allow people to travel without increasing vehicle emissions or congestion. Recent national and local

"Most surveys report that traffic safety is the major factor deterring individuals from bicycle commuting."
- FHWA National Bicycling & Walking Study, Case Study #1



surveys have found that people are more willing to bicycle – and to bicycle more frequently – when better bicycle facilities are provided. Studies also indicate that when bicycle facilities are provided, more people are willing to use their bicycle for travelling purposes. If more people shift to bicycles for either their entire trip or for the trip to a transit station, the transportation system can serve more trips without increasing congestion or emissions.

Response to Growing Public Interest in Bicycling

As in many other areas across the United States, residents of the Bay Area are increasingly interested in bicycling as a means of transportation. Bicycling offers a low-cost and non-polluting way of getting to work, shopping, school, and other destinations. There also is growing interest in encouraging bicycling and walking as a means for improving public health. Increasingly, public health organizations are looking to urban planners to create more walkable and bikeable communities to encourage healthier lifestyles in the United States.

MTC AND BICYCLING IN THE BAY AREA -- BACKGROUND AND CURRENT CONTEXT

MTC administers many different funding programs for bicycle infrastructure, and also played a crucial role in the creation of the Intermodal Surface Transportation Efficiency Act and the Transportation Equity Act for the 21st Century. Both federal transportation funding bills allow greater flexibility in the use of transportation funds – an important development for building bicycle facilities. Furthermore, the MTC Transportation for Livable Communities (TLC) program encourages the creation of pedestrian-, transit-, and bicycle-friendly communities by offering grants to local jurisdictions attempting to improve non-motorized transportation options along with new development and redevelopment activities.

MTC operates as the Bay Area Toll Authority (BATA) as a result of Senate Bill 226; its responsibilities include the programming, administration, and allocation of the base bridge toll revenues (excluding the seismic surcharge) from the state-owned toll bridges in the Bay Area. BATA also is charged with funding capital improvement and rehabilitation projects for the toll bridges. In overseeing activities related to Bay Area bridges,

MTC attempts, wherever possible, to provide for bicycle access across the Bay.

As MTC and Caltrans move forward with bridge seismic retrofit and replacement programs, bicycle access will be provided on all Bay bridges in one form or another. Direct bicycle access will be provided on all bridges. The Bay Bridge East Span will provide direct bicycle access from the East Bay to Yerba Buena Island. Funding has not been identified for the proposed bike lanes on the western span of the bridge.

For bridges without bicycle facilities, bicycle shuttles and other alternative means of crossing the bridge will be provided. Access plans are described below:

- **Richmond-San Rafael Bridge:** Transit buses currently operating on the Richmond-San Rafael Bridge have capacity for two bicycles per bus. Should demand exceed the two-bicycle limit, a back-up taxi service has been implemented. Taxis called by Golden Gate Transit operators to provide bike shuttle service across the bridge.
- **San Francisco-Oakland Bay Bridge:** BART offers a critical transbay link in the Regional Bicycle Network. Bicycles are allowed on BART trains at all times except during the commute periods in the peak directions of travel.

The Bay Bridge Bicycle Commuter Shuttle operates during the commute hours that BART access is not available. Bicyclists are transported across the Bay Bridge by means of a 14-passenger van towing a trailer equipped with 14 bike racks. The fare is \$1. The San Francisco loading area is at the Transbay Terminal at First and Mission streets and the Oakland Loading Area is in front of the MacArthur BART station.

- **San Mateo-Hayward Bridge:** A bicycle shuttle is being planned to offer transbay access across this bridge. Service should be operational by 2002.

The MTC works in partnership with RIDES for Bay Area Commuters and the Solano/Napa Commuter Information (SNCI) to encourage the use of bicycling for Bay Area commuters. RIDES and SNCI are responsible for coordinating the annual Bike-to-Work Day activities and for working with

commute coordinators at the region's major employment sites. RIDES also offers a *RIDES' Bicycle Resource Guide*, which provides important information about bicycling and how to ride to work safely.

Establishing a Regional System

In a recent poll of 600 registered voters, 76 percent of respondents said they thought the city of San Francisco should add more bike lanes.

-source: David Binder Research, October 1997

Many Bay Area trips occur between jurisdictions, from city to city or county to county. While traveling and trip-making decisions do not take jurisdictional boundaries into consideration, transportation planning and funding decisions do. As a complex and large geographic region, the Bay Area needs to ensure that travel corridors are consistent between jurisdictions and between regions. Historically, bicycle planning and policy were set at the local level. Given the local focus of bicycle planning, many saw the development of a regional plan as an opportunity to improve coordination and connectivity between counties. This plan will allow MTC to coordinate projects among jurisdictions to ensure that crucial linkages – particularly to transit – are created in a timely manner.

Making the Connection: Bicycles and Transit

Bicycling plays an increasingly vital role in the Bay Area transportation system. As congestion escalates, residents seek alternatives to driving such as riding transit or bicycling. Access to the region's transit system, however, is becoming more difficult as park-and-ride lots fill early in the morning, leaving people with the option of driving their entire trip or finding another way to reach the transit station. Bicycling can be part of the solution, offering an ideal mode to connect with transit systems such as BART or Caltrain.

The bicycle/transit connection was of primary interest to many members of the Oversight Committee and at the public workshops. Transit operators in this region have taken significant strides to accommodate bicycles on their systems. Through the creation of "bike on board" capability and the provision of secure bike storage at stations, bicycles become meaningful options for people trying to reach the region's transit system at one or both ends of their trip. Most of the region's bus operators have vehicles that are fully equipped with bicycle racks, or are actively implementing bike rack programs. One example of the latter is San Francisco Muni, which is beginning to implement a bike rack program on their

new bus fleet. The region's rail operators, with the exception of San Francisco Muni Metro, allow bicycles on board although there are capacity issues for some operators. Bicycles also are allowed on the region's ferry system. Even with the dramatic change in bicycle access to the transit system over the past 12 years, the riding public believes more could be done in terms of bicycle parking, bicycle access to transit stations, and exploring other ways of accommodating bicycles on board train systems, particularly Caltrain and BART. Bicycle access to transit stations and better bicycle storage or on-board options were high priorities expressed at the public workshops, in surveys, and by Oversight Committee members.

Developing Regional Funding Priorities

The Regional Bicycle Plan designates a regionally significant bikeway network and supporting programs and activities. This network and the support program can help encourage local jurisdictions to focus on the regional network, allow MTC to advocate for additional bicycle funding, and could inform funding decisions at the regional level.

Establishing Regional Support Programs

Some metropolitan planning organizations (MPOs) around the country view their role in bicycle transportation exclusively as fund administrators. Others have lively bicycle programs, regional bicycle advisory committees, bicycle coordinators, and various activities and resources, including bike maps, bike commute assistance, bikeway planning assistance, etc. Some MPOs even purchase and develop land for shared-use paths. This plan identifies several areas where MTC could expand its role in the field of bicycle planning. These activities go beyond funding decisions and would provide support and coordination activities for bicycling.

PLANNING GOALS AND OBJECTIVES

This chapter outlines the goal and objectives that served as guidelines in the development of the Regional Bicycle Plan, and express MTC's interest in increasing efforts directed toward bicycling.

PRINCIPAL GOAL:

Ensure that bicycling is a convenient, safe, and practical means of transportation throughout the Bay Area for all Bay Area residents.

Federal and state directives are placing greater emphasis on accommodating pedestrians and bicyclists when designing roadway facilities. Of particular note is Caltrans Deputy Directive (DD) 64 issued by Caltrans earlier this year. MTC's goal is to echo these directives and use them as a framework for the plan itself. For the region to make strides towards improving bicycle travel, however, this goal must be embraced by many different organizations, including cities, towns, counties, transit operators, the bicycling public, and other partner agencies of MTC.

"The needs of non-motorized transportation must be considered on all highway projects."
-Chapter 1000, *Highway Design Manual*

Objective 1.0 The Regional Bicycle Network

Define a comprehensive regional bikeway network.

Policies:

- 1.1 Develop a cohesive system of regional bikeways that provide access to and among major activity centers and public transportation.
- 1.2 Ensure all regionally funded transportation projects consider enhancement of bicycle transportation consistent with Caltrans Deputy Directive 64.
- 1.3 Ensure the bikeway network serves bicyclists of a wide variety of abilities.
- 1.4 Encourage bicycle-friendly design on all streets and roadways through new technologies, "best

"The Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products."
-Caltrans Deputy Directive 64

practices” standards, guidelines, and innovative treatments on all new roadways and multiuse paths.

Objective 2.0 Multimodal Integration

Develop and enhance opportunities for bicyclists to easily access other modes of transportation.

Policies

- 2.1 Encourage transit agencies to promote, provide, and maintain convenient and secure bike parking facilities -- racks, bike lockers, in-station bike storage, and staffed bicycle parking facilities -- at transit stops, stations, and terminals.



Golden Gate Transit bus equipped with bike rack

- 2.2 Facilitate multimodal transportation cooperation with local and regional transit agencies to ensure bicycles can be accommodated on all forms of transit and that adequate space is devoted to their storage on board whenever possible.

- 2.3 Improve bicycle access to transit hubs and stations by means of signage and bikeways.

- 2.4 Encourage bicycle-friendly development activity and support facilities, e.g., bicycle rental and repair, around transit stations.

Objective 3.0 Comprehensive Support Facilities

Encourage the development of comprehensive support facilities for bicycling.

Policies

- 3.1 Encourage local jurisdictions to adopt ordinances requiring bicycle parking and storage, and shower and locker facilities for all new developments and major redevelopments.
- 3.2 Encourage local jurisdictions to offer incentives for employers who provide indoor bicycle parking for their employees.
- 3.3 Provide bike access, wherever possible, across all Bay Area toll bridges.
- 3.4 Continue to require cities and counties to form and maintain bicycle advisory committees, and to develop and update comprehensive bicycle plans as a condition for receiving Transportation Development Act (TDA) funds.

- 3.5 Ensure ongoing maintenance and monitoring efforts that support the implementation of the regional bikeway system.

Objective 4.0 Bicycle Education, Promotion, and Safety

Develop public outreach materials to emphasize bicycle safety and the positive benefits of cycling.

Policies

- 4.1 Encourage and support the creation or expansion of comprehensive safety awareness, driver education, cyclist education and diversion training programs for cyclists and motorists.
- 4.2 Develop a comprehensive bicycling promotion outreach effort to advocate bicycling as a healthy transportation choice, both physically and environmentally.

Objective 5.0 Funding Sources

Develop an orderly, equitable, and effective regional funding and implementation process.

Policies

- 5.1 Establish a funding system that equitably directs regional funds to improve and expand bicycle facilities throughout the Bay Area.
- 5.2 Consider the direct and indirect benefits of bicycling in the allocation of funding and in developing performance measures.

Objective 6.0 Planning

Continue to support bicycle programs with ongoing planning.

Policies

- 6.1 Ensure ongoing planning efforts that support projects in the Regional Bicycle Plan.
- 6.2 Update the Regional Bicycle Plan every three years, in coordination with Regional Transportation Plan updates, to chart progress in developing the system and respond to changing circumstances.

- 6.3 Form a regional bicycle working group to oversee activities in this plan.

EXISTING CONDITIONS

The decision to use a bicycle for transportation purposes can be influenced by weather, terrain, experience, and the existence of bicycle facilities along the route. Evaluating these conditions is the first step toward developing a bicycle infrastructure. The purpose of this chapter is to evaluate the physical conditions of the region and the state of the bicycle system to determine the need for bicycle facilities in the Bay Area.

PHYSICAL AND URBAN SETTING

The nine-county Bay Area encompasses 7,200 square miles of varied physical conditions. The region's bays, rivers, hills, and mountains help define the Bay Area's sub-regions, but they also impede travel within and among those regions. The Bay Area's geography makes it a unique and distinctive region but also presents challenges for bicycle transportation. Despite the obstacles, bicycling is a relatively popular form of transportation in the Bay Area compared to both the state and country as a whole, with pockets of relatively high bicycle usage.

The Bay Area's geography ranges from the cool and wet hills of the Coast Range facing the Pacific Ocean, to the dry and hot inland areas bordering the Central Valley. The urban core is centered on the plains surrounding San Francisco and San Pablo bays, the focus of the original settlement by the Spanish. While population is still concentrated around these bays, urban settlement has expanded across the East Bay hills, south from the Santa Clara Valley and north into the Russian River Valley.

Land-use changes also result in changing transportation needs. While the historic areas of the urban core have high density and compact land uses that are easy to serve with transit or bicycles, much of the region is characterized by low-density land-use patterns, and while there is a strong commitment to transit, ferry, and rail systems, these rapid changes in living and work conditions place pressure on fixed route systems to offer greater flexibility. Linking bicycling with transit lines can offer more options for travelers. Bicycles also present an opportunity for transit systems to bring more

people to transit stations without increasing parking for automobiles at those stations.

WHO BICYCLES?

Bicycle usage in the Bay Area is difficult to quantify. The U.S. Census “journey-to-work” data is available for 1990, but 2000 census data will not be released until next year. The most recent alternative source for regional bicycle mode share information is the *Commute Profile 2000* from RIDES for Bay Area Commuters, which is used here. The bicycle commuter ridership data from *Commute Profile 2000* is compiled from annual regionwide telephone surveys that delineate the commuting patterns within the region.

The “journey-to-work” data is a limited resource because it asks people for their primary mode of travel to work; bicycling can often be a secondary or linked mode to transit. In addition, bicycle trips to schools are not counted, though they directly replace vehicle trips.

The table on the following page presents a summary of the 1990 and 2000 data for each Bay Area county and the Bay Area as a whole. Overall, the percentage of commuters rose slightly from the 1990 census figures. Napa County was the only county where fewer bicycle commuters chose bicycling in 2000 than in 1990.

Additional data for California, the United States, and some selected cities in the Bay Area are shown for 1990. As indicated by this data, the Bay Area has a higher percentage of bicycle commuters than the state and nation. Some communities, such as Berkeley, Menlo Park, and Palo Alto, have proportionally more bicycle commuters than the region as a whole, partly because of the high number of college students in these cities.

Other sources for evaluating bicycle usage in the Bay Area include surveys and questionnaires completed as part of local bicycle master plans, and actual bicycle counts conducted by local agencies. Surveys and questionnaires summarized in county and city bicycle master plans are typically based on a limited sampling size, and are not necessarily statistically valid indications of bicycle usage. Despite this caveat, these questionnaires do provide useful information on routes people choose and avoid and what factors influence people to ride

or not ride their bicycles, and with what frequency — often with a consistent pattern of responses from area to area.

Table 3.1
PERCENTAGE OF BICYCLE COMMUTERS, 1990 and 2000

COUNTY	1990		2000	
	TOTAL POPULATION ¹	BICYCLE COMMUTERS (%) ²	TOTAL POPULATION ³	BICYCLE COMMUTERS (%) ⁴
Alameda	1,279,182	1.3	1,443,741	1.8
Contra Costa	803,732	0.5	948,816	0.5
Marin	230,096	0.7	247,289	1.0
Napa	110,765	1.2	124,279	0.3
San Francisco	723,959	1.0	776,733	2.8
San Mateo	649,623	0.8	707,161	1.8
Santa Clara	1,497,577	1.5	1,682,585	2.3
Solano	340,421	0.7	294,542	0.8
Sonoma	388,222	1.0	458,614	1.3
Bay Area	6,023,577	1.1	6,683,760	1.4
United States	248,709,873	0.4	281,421,906	NA *
California	29,760,021	0.9	33,871,648	NA *
Palo Alto	55,900	5.8	58,598	NA *
Berkeley	102,724	4.9	102,743	NA *
Menlo Park	28,001	4.5	30,785	NA *

¹ Source: 1990 Census

² Employed adults ages 16 and older who reported bicycling as their primary mode of transport to work

³ Source: 2000 Census

⁴ Source: *Commute Profile 2000*, RIDES for Bay Area Commuters, random telephone survey of 3,600 Bay Area adults, March-April 2000

* Not available until late 2002

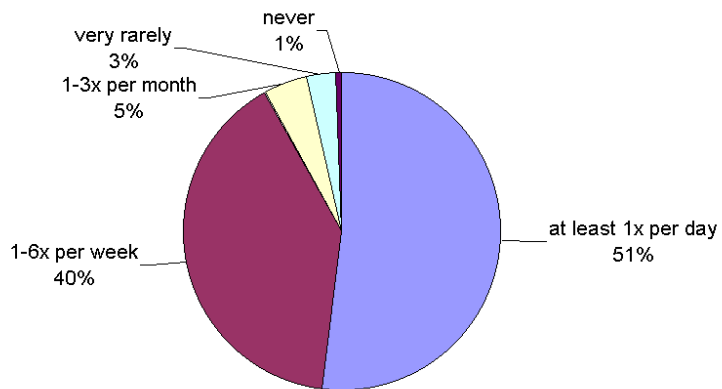
PUBLIC SURVEY: CYCLING IN THE BAY AREA

From May through August 2001, MTC solicited public comments about cycling in the Bay Area via surveys distributed through MTC's Web site, public workshops, advocacy groups, and cycling stores regionwide. MTC collected over 200 completed surveys, which included questions about respondents' activities and needs as cyclists.

The survey responses helped shape the recommendations in Chapter 4 of this report.

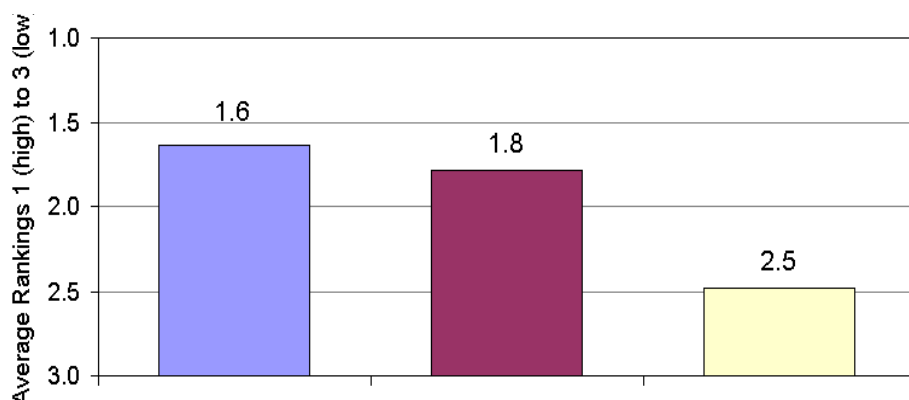
In Figure 3.1, on page 3-4, the responses show the current level of bicycling for the survey respondents. Of those surveyed, over 90 percent of survey respondents rode their bicycles at least once per week. Most respondents, therefore, can be considered “active” cyclists. However, where cycling represents about 1.4 percent of all trips, it is likely that in a representative sample of the region, there would be substantially fewer active cyclists.

Figure 3.1: CURRENT LEVEL OF BICYCLING



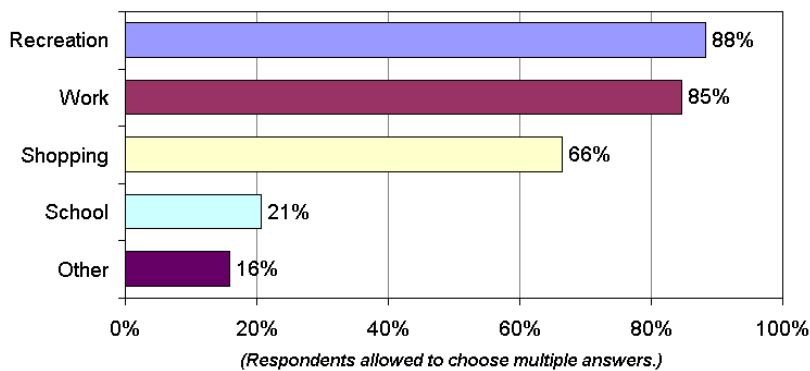
In Figure 3.2, responses to the question about preferred type of bicycle facility are represented by an average, with 1 being “most preferred” and 3 being “least preferred.” On average, survey respondents preferred striped on-street bicycle lanes (class 2), followed by trails or paths that are off-street, signed on-street bike routes being the least popular.¹ (An on-street bike route is a path of travel that does not have a separate lane or facility for a bicyclist. Instead, there is merely a sign indicating the street is also a bike route.)

Figure 3.2: PREFERRED TYPE OF BICYCLE FACILITY



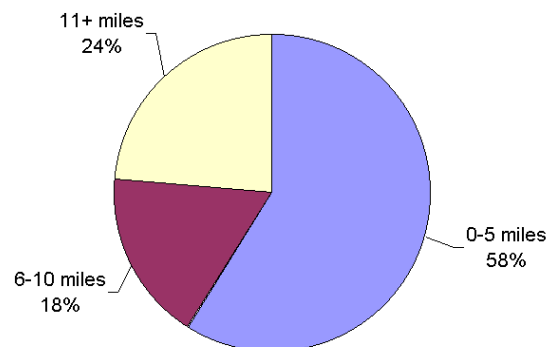
Survey respondents were questioned about the purpose of their trips by bicycle. "Work" and "recreation" received the largest number of responses, but "Shopping" also were another major reason for bicycle use. "School" was only selected by 21 percent of the survey respondents.

Figure 3.3: REASONS FOR BICYCLING BY TRIP PURPOSE



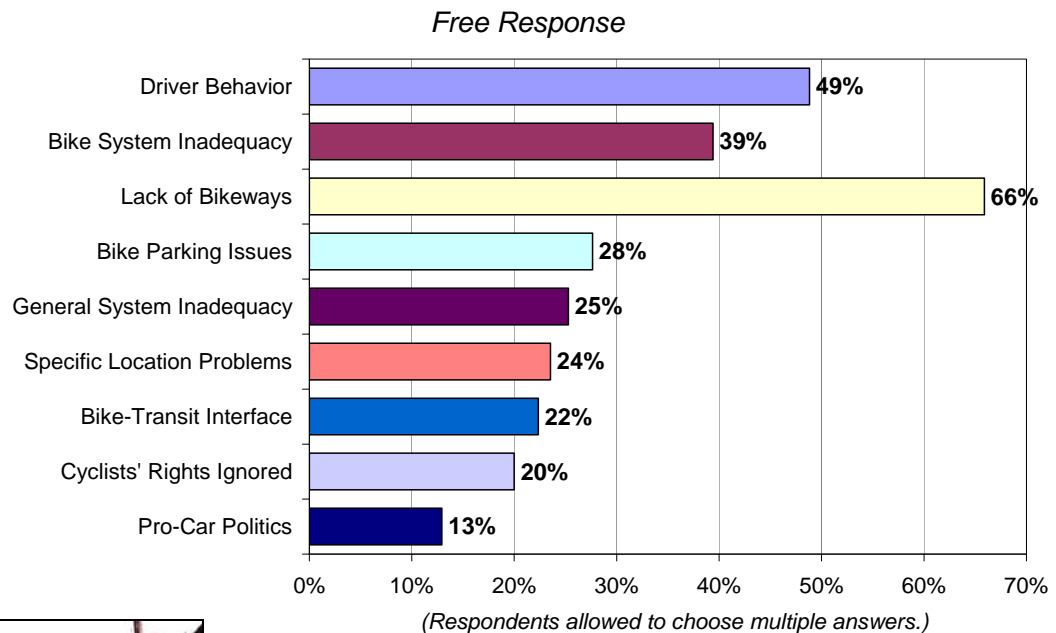
Bicycles are an ideal mode for shorter trips of five miles or less. This also is the average distance bicycle trip-making purposes for survey respondents. This finding is true for the survey respondents for the bicycle plan. Nearly 60 percent use their bicycles for trips of five miles or less. For longer trips, the respondents are about evenly split between six to ten miles or over ten miles.

Figure 3.4: DISTANCE OF BICYCLE TRIP TO WORK OR SCHOOL



Survey respondents also were asked their opinion about why more people don't ride their bicycles and what the major barriers to cycling are. The top rated constraint was lack of adequate facilities, followed by driver behavior/safety.

Figure 3.5: PERCEIVED CONSTRAINTS TO BICYCLING IN THE BAY AREA



Guerneville bicycle and pedestrian bridge

The surveys indicate substantial cyclist demand for a variety of bicycle facilities. Although a majority of respondents cycle a short distance to work or school, a full 42 percent cycle more than six miles to those destinations, indicating a clear demand for cycling infrastructure beyond city centers. Furthermore, over 85 percent of a respondents cycle to work, and 88 percent cycle for recreational trips that tend to be longer in nature than those for shopping and school. In the free response section, 48 percent of respondents called for development of the regional bike infrastructure. The lack of bikeways ranked highest among respondents' reasons for not riding more often.

Safety

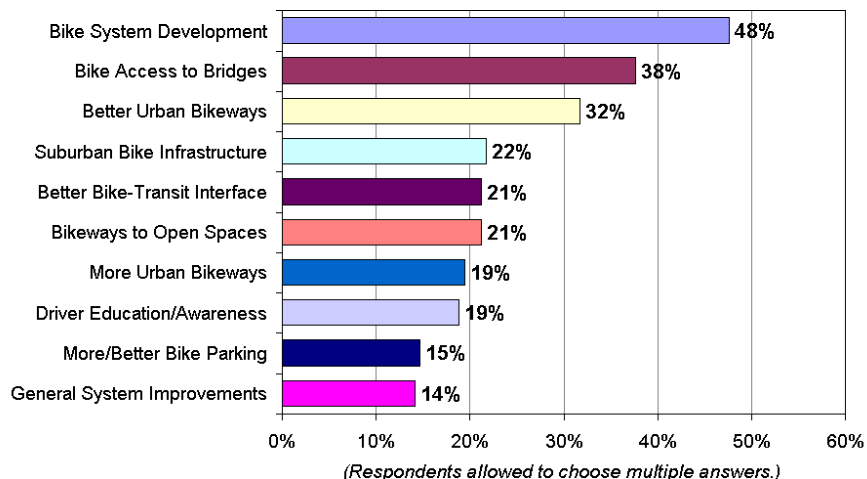
Respondents ranked safety second among reasons they do not ride more often, and nearly half all of respondents said driver behavior is a major constraint to Bay Area cycling. A fifth of respondents felt cyclists' rights are routinely ignored by

drivers or police, and 19 percent called for better driver education of cyclists' rights.

Facilities

Although a lack of bikeways was clearly identified as a major cyclist issue, respondents also were concerned with the quality of existing bikeways. Nearly 35 percent of respondents indicated that existing bikeways are inadequate in terms of length, quality, and connections to other paths and lanes. Higher-quality off-street bike paths come in a close second to on-street bike lanes as a preferred type of bikeway. Respondents also desired sheltered bike parking, employer incentives, and better interface of bikes with public transit services.

Figure 3.6: TOP 10 PROJECTS RESPONDENTS WOULD LIKE TO SEE
(Free Response)



Other cities have found that the increasing presence of bikeway facilities does translate to increased ridership. For example, Portland, OR, found that as it went from 1 percent completion of its bikeway network in the 1970s to 10 percent by 1990, bike use grew by about 200 percent. From 1990 to 1995, bike use grew by 104 percent as the network completion went to 23 percent. As it grew to 47 percent complete in the late 90s, bike use grew by 91 percent. Looking at specific locations, Portland found an average 137 percent increase in bicycle use at eight locations in the 1990s. In San Francisco, the installation of 10.5 miles of bicycle lanes in the late 1990s led on average 61 percent increase in

bicycle use at eight locations, while Seattle found an average 90 percent increase from 1985 to 1995 at seven locations along the Burke-Gilman and Sammamish River trails.

TRANSIT STATION ANALYSIS

A key instrument for encouraging higher levels of bicycling is a public transportation system that accommodates bicyclists' needs. Many of the regional transit agencies have active bicycle programs, including BART and Caltrain. BART is currently addressing overall bike access issues at all of its stations with a comprehensive Bike Access Plan. It also will create specific access plans at five stations by the end of the year, with more station access plans to follow in coming years.

In Appendix D is a sample analysis of access to and bicycle parking at major transportation centers, commuter and BART rail stations, and ferry terminals. The criteria for analyzing these locations are highlighted below.

1. Access

- a. Good– existing bikeways lead directly to station, terminal, or transit center
- b. Fair– existing bikeways come within 1/4 mile of station, terminal, or transit center
- c. Poor– bikeways farther than 1/4 mile from station, terminal, or transit center, or traffic conditions and roadway configuration nearby are major deterrents to accessibility

2. Parking Quantity

- a. Good– enough parking to satisfy the demand
- b. Fair– some bikes found locked to trees, signs, etc. when racks are full
- c. Poor– either no parking at all or seriously lacking adequate parking

3. Parking Quality

- a. Good– condition of parking facilities is good and a variety of parking (lockers, bike lids, etc.) serve the users; parking under observation, located in well-lit and sheltered areas
- b. Fair– racks in decent condition, some need for long-term parking
- c. Poor– racks in poor condition and/or 'wheel-bender' racks are installed, which lead bicyclists to

lock bikes to other stationary objects; parking exposed to the elements

Not surprisingly, there is a wide variation in the quality of parking at the region's transit centers. The matrix in Appendix D provides a starting point for identifying a "safe routes to transit" program and for improving bicycle storage at the region's main transit stations.

OPPORTUNITIES AND CONSTRAINTS

Overall, the Bay Area bikeway system is planned but not completed. This is true for the countywide plans and the Regional Bicycle Network. A number of simpler projects have already been completed and what remains are many of the most difficult areas in which to develop bikeways, whether due to constricted street widths, heavy traffic volumes and speeds, or topography. At the same time, there are opportunities throughout the region to improve bicycling conditions and increase the extent of biking, including:

- A. New transportation projects where bicycle facilities can be integrated into the design process
- B. Shoreline areas where the public desires access
- C. Natural and manmade waterways that offer a scenic corridor bypassing busy arterials
- D. Lower traffic collector and arterial streets that offer a good combination of connectivity, lower traffic volumes and speeds, and wider streets
- E. Abandoned and active railroad corridors
- F. Transit corridors
- G. Utility corridors
- H. Freeway corridors and frontage roads.

Constraints challenging the expansion of bicycling in the region that need to be overcome include:

- A. Narrow, heavily-traveled arterial streets with little room
- B. Lack of motorist knowledge about the rights of bicyclists to share all roads unless expressly excluded
- C. Lack of adherence to traffic laws by motorists and cyclists alike
- D. Lack of on-board or terminal bicycle storage for many ferry, transit, and commuter rail services
- E. Freeway interchanges
- F. Pavement and roadway maintenance conditions

- G. Lack of access to some key bridges
- H. Limited capacity on various transit lines/services
- I. Poor access to major transit hubs.

The Bay Area shares many of these opportunities and constraints with other regions throughout the nation. Building on the opportunities and overcoming the constraints, however, will require addressing the specific characteristics of the Bay Area. If successful, the region will be able to take advantage of bicycling as a useful and environmentally sensitive form of transportation.

REGIONAL BIKEWAY NETWORK

The proposed Regional Bikeway Network defines the bicycling corridors that are of regional significance. This network was developed using local and countywide plans as a framework. It also provides a snapshot of what is needed to build a connected system of routes and facilities to support safe and convenient bicycle access throughout the region.

Considering that there are limited facilities to support bicycle travel in the Bay Area, it is remarkable that cycling already represent 1.4 percent of all trips taken in the region. While every county has or is developing a countywide bicycle plan, only 35 percent of the facilities proposed for the region already exist. Therefore, 65 percent of the proposed bicycle infrastructure is not built. How often a bicycle is used to link to transit service is unknown, but there are significant demands for bicycle parking at the region's rail stations and many transit operators are facing on-board capacity issues. The creation of the Regional Bicycle Network and better facilities and access to the region's transit network and activity centers is expected to increase bicycle usage.

REGIONAL BICYCLE NETWORK SELECTION

All of the nine Bay Area counties and most cities and towns have (or soon will have) adopted bike plans. The Regional Bicycle Network is composed of high-priority bicycle projects (existing and proposed) in county or local bikeway plans. In a few cases, new routes were proposed or existing routes adjusted to achieve inter county connectivity. Contra Costa and San Francisco counties are both writing or updating their bicycle plans. Many of the projects identified in Appendix A are not in adopted countywide plans, but supplied by the county BACs and the CMAs.

The development of the Regional Bikeway Network is oriented toward utilitarian bicycle trips and emphasizes regional connectivity and connections to the transit system. Local routes may serve other purposes, and identifying the Regional Network does not imply that local bikeways are somehow demoted or will not be funded. The regional system may have

greater significance or emphasis for decisions being made at the regional level with respect to bicycle transportation.

The recommended regional bikeways were selected based on the following criteria:

1. Provide connections to every incorporated town and city and to unincorporated areas with populations of over 5,000 people, and between the Bay Area and surrounding regions.
2. Provide connections to the regional transit system, including multimodal terminals, ferry terminals, BART stations, commuter rail stations, and Amtrak.
3. Provide connections to major activity centers such as universities, hospitals, parks, athletic venues, and shopping malls.
4. Provide access within or through the major central business districts of the region.
5. Comprise part of the existing, planned, or proposed Bay Trail system. The Bay Trail is an interconnected system of routes ringing San Francisco Bay and being implemented by the Association of Bay Area Governments. It is included as a separate facility, given its regional importance).

Maps of the proposed Regional Bikeway Network are shown at the end of the Executive Summary of this plan. A breakdown of the proposed network mileage by county, as well as existing mileage versus proposed mileage, is shown in Table 4.1. The Regional Bikeway Network is defined by corridors, and exact alignments (street, path, or route) may not be determined or may change based on further study. Short routes that connect regional bikeways to transit stations are not shown on the map due to the scale, but are considered a part of the regional system.

Routes that serve as regional recreational connections only or that traverse very steep terrain on narrow roadways are typically not included. Routes that fit this description but that provide important intraregional connections (e.g., the San Clara-Santa Cruz connection via mountain roadways) are included.

All of the Bay Area's state-owned toll bridges and ferry systems are included as part of the Regional Bikeway

Network, since bicycle travel is accommodated either directly or indirectly on all of these important regional connections.

Table 4.1
REGIONAL BIKEWAY SYSTEM

	REGIONAL BIKEWAYS			
COUNTY & BRIDGES	PROPOSED BIKEWAYS (miles)	EXISTING BIKEWAYS (miles)	BAY TRAIL* (miles)	TOTAL COUNTY BIKEWAYS (miles)
Alameda	225.4	87.6	105.0	418.0
Contra Costa	113.1	138.5	69.1	320.7
Marin	54.4	9.6	53.2	117.2
Napa	51.7	27.9	16.6	96.2
San Francisco	36.1	45.4	10.0	91.5
San Mateo	111.3	33.0	60.4	204.7
Santa Clara	90.1	93.9	54.7	238.7
Solano	94.6	41.0	27.6	163.2
Sonoma	149.2	28.9	40.8	218.9
Bridges	7.0	17.5	0	24.5
Total	932.9	523.3	437.4	1893.6

* Bay Trail includes both existing and proposed segments.

A complete list of countywide and Bay Trail projects is shown in Appendix A. This list will change as projects are completed and priorities change. The projects identified do not represent the entire bike network -- only those segments that have yet to be built and require funding.

The recommended system for prioritizing, evaluating and funding bikeway projects in the Bay Area is presented in the *Toolkit*, which is provided in Appendix E.

ACTIVITIES TO IMPROVE CONDITIONS FOR CYCLING IN THE BAY AREA

Caltrans Deputy Directive 64

Caltrans Deputy Directive 64 (DD 64) outlines how Caltrans plans to implement the U.S. Department of Transportation policy on integrating bicycling and walking into transportation infrastructure throughout the state of California. The directive was issued in March 2001, and is new for Caltrans as well as

partner agencies such as regional transportation planning agencies and metropolitan planning organizations. The full directive is available in Appendix B of this report, and a brief summary of the directive follows:

The Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products. This includes incorporation of the best available standards in all of the Department's practices. The Department adopts the best practice concepts in the US DOT Policy Statement on Integrating Bicycling and Walking into Transportation Infrastructure.

Given the recent release of the directive, there are still many questions about how to implement this policy at the regional and local level. Some suggested approaches are currently being explored by MTC staff in consultation with Caltrans and other agencies. With the help of Caltrans and partner agencies at the city and county level, MTC will move toward implementing this policy in the Bay Area.

The benefit of following DD 64 is that it ensures bicycle and pedestrian access is considered for all new road projects, eliminating the need to retrofit roadway projects to accommodate pedestrians and bicycles after the fact. This ensures that all public roads provide the highest level of access for all users of the transportation system.

Regional Bicycle Working Group

MTC proposes to lead an ongoing Regional Bicycle Working Group (RBWG). This group will oversee the activities described in this plan and follow up on outstanding issues. The RBWG is expected to be composed of representatives from county governments, the Bay Area Air Quality Management District, the Regional Bicycle Advocacy Coalition (REBAC), and representatives from local cities and transit agencies. MTC proposes the RBWG assist in the following areas:

- Data collection and analysis
- Enhancement of the bicycle-transit connection
- Outreach, marketing, and education
- Other issues related to cycling

Data Collection and Analysis

A basic part of all transportation analysis is an understanding of usage and activity. Vehicle counts are conducted as part of almost all traffic studies, while bus and rail ridership figures are used to study trends in transit ridership. Almost no comparable information is available on bicycle ridership. In fact, most projections of bicycle usage are based on U.S. Census journey-to-work data, which is adequate for regional or areawide analysis but not for specific corridor usage. Further, many suspect that journey-to-work data under represents bicycle use, as bicycles are often coupled with transit for trips to work and the survey does not capture the bicycle portion of the trip when querying those surveyed about primary mode of travel. Also, bicycles used for purposes other than work trips are not counted either. Without this basic information, it is difficult for counties and cities in the Bay Area to understand trends in bicycle usage, or to determine whether investments are resulting in higher levels of use.

MTC proposes to lead efforts to collect, analyze, and disseminate user- and safety-related data, in the form of an annual “State of the Region” report. The report also could provide estimates of air quality, energy efficiency, health, and mode share impacts of bicycling. Two areas of particular interest will be the bicycle counts conducted and the annual crash data collected for the report.

Bicycle Counts

Bicycle counts are conducted at various locations throughout the Bay Area but without consistency in how they are conducted or on a regular basis. Counting usage of key facilities throughout the region will provide a snapshot of overall trends in bicycle use. Currently, the best resource for use data other than U.S. Census or commute profile surveys are the counts required by the Bay Area Air Quality Management District (BAAQMD) as part of Transportation Fund Clean Air (TFCA) funded projects. Applicants for funding are expected to conduct pre- and post-project bike counts to help determine if the project has been successful. Other cities and agencies conduct counts at different times and locations as part of overall traffic counts. However, survey methods are not uniform, and the data is not useful for developing a picture of trends in usage in this region.



There are four primary reasons why bicycle counts should be an essential and regular activity:

1. *Conditions and trend analysis* – consistent bicycle count effort would help to show the number of people currently bicycling, how this number is changing over time, and the characteristics of the cyclists. This would help assess the need for bikeway improvements and the appropriate design and capacity of those improvements.
2. *Network planning* – consistent bike count would help to prioritize improvements, justify the inclusion of bikeways as part of new development, as mitigations to impacts, and as part of transportation projects.
3. *Crash analysis* – consistent bike count would help to develop base usage information so that bicycle-related collision information could be correlated to bicycle usage. Without this information, there is no way to compare the relative safety of facilities.
4. *Demand forecasting* – consistent bike count would help to calibrate regional projection models on future bicycle usage and needs, and to develop a corridor-demand projection methodology based on count data.

As a part of its “State of the Region” report, MTC will work with the BAAQMD and other stakeholder groups to implement a count system regionwide and evaluate the usefulness of this exercise after two years. The methodology developed will help to identify trends and changes in the use of bicycles over time. Working through the Regional Bicycle Working Group, MTC will implement the methodology outlined in the Toolkit with the help of partner agencies and advocacy groups throughout the region.

It is hoped that user surveys can be incorporated into the counting process. Survey questions could include, among other things, trip purpose, trip length, and income level. This would be used to derive information on whether a bikeway improvement affected a user’s decision to ride, or whether the bicyclist previously drove a car, used transit, etc.

Accident Data

MTC proposes to undertake an annual analysis of State Wide Integrated Traffic Records System (SWITRS) bicycle-crash related data. It also will collect and analyze other bicycle-related data, such as hospital emergency room records. The analysis will focus on four main areas:

- Bicycle crash trends, regionwide and broken down by counties and local jurisdictions;
- Presumption of fault;
- Cause of crash, e.g., wrong-way riding, or motorist failing to yield;
- Relationship of crash location and causes to facility deficiencies at and around the site;
- Demographic trends, e.g., age of those involved.

This analysis will be provided to local jurisdictions, which will then further analyze the specific patterns and locations at which crashes are occurring.

Enhancement of the Bicycle-transit Connection

The main multimodal elements for bicycles are access, parking and secure storage, on-board storage, and information. Just as MTC has played a major role in regional transit promotion, it proposes to play a similar role in regional bike/transit integration. Improving conditions and access must be discussed with the transit providers, who have already made significant strides to accommodate bicyclists on their systems. The working group can help improve the connections to transit and be a venue where transit operators and cyclists identify solutions to some of the continuing issues associated with transit access for cyclists.



Berkeley Bikestation™

Some of the suggested topics for discussion include:

- Adding bike parking and storage capacity at stations with high demand (e.g. the San Rafael Transit Center);
- Improving on-board storage, including new storage systems that maximize the number of bicycles that can be carried on-board;
- Developing of bike loaner programs to allow people to use bicycles at either end of their transit trip;
- Exploring station access and development of a safe-routes-to-transit program.

Promotional Ideas, Marketing and Outreach

MTC currently funds RIDES for Bay Area Commuters and Solano/Napa Commuter Information (SNCI) for a variety of transit, transportation demand management, carpooling, and outreach services. These agencies conduct a limited amount of bicycle-related outreach to encourage an alternative to driving alone. Their most visible and popular bicycle promotion campaign is the Bike-To-Work Week event, which seeks to encourage employees to try bicycling to work. MTC and members of the Regional Bicycle Plan Oversight Committee are working with RIDES on this important activity.

The success of the *2001 Regional Bicycle Plan* depends largely on individual city and county acceptance and promotion of

the plan's recommendations. Some county and local entities already have promotional programs, to varying extents. For instance, Solano/Napa Commuter Information (SNCI) is a public agency with free information and services for all alternative transportation in Solano and Napa Counties and into surrounding regions. In addition, advocacy and community groups, such as the county-level and multicounty bicycle coalitions, and the Regional Bicycle Advocacy Coalition play a major role in bicycle promotion.

One of the "barriers" often discussed at public outreach meetings and with the Oversight Committee is limited information about bicycle facilities and limited knowledge about where to travel. People often don't have and/or don't know where to obtain bicycle maps of their area or, even more importantly, other areas. Bicycle map distribution tends to be very local. Sometimes, maps of an entire county are available but may be difficult to find. Many bicyclists have asked for a convenient way to plan trips throughout the region. Efforts such as the Take Transit™ trip planning software or brochures such as *Getting There On Transit*, published by MTC, also can be applied to bicycle transportation. These initiatives can help educate and inform the public. The goal is to encourage a shifting of trips to bicycles. Other information products might include:

Web-Based Trip Planner

Finding a route can be a difficult process, requiring the cross referencing of various bicycle maps to piece together a desired trip from, for example, San Francisco to the East Bay, or from Redwood Shores to Palo Alto, or from downtown Sonoma to downtown Napa. Add in access policies for transit operators and it becomes quite an exercise. Not only does this complicate trip planning, but some would argue it functions as a barrier travel in general. An interactive, Web-based regional bicycle mapping system can provide detailed route maps and help cyclists find their way without a regional bicycle map. This would be a long-term development and implementation project. It is feasible and MTC will explore developing a trip-planning package for cyclists.

Training Programs and Resources

As the Bay Area's counties and cities work to implement their bicycle plans, they find that staff are often unfamiliar with Caltrans directives to accommodate bicyclists or standard

bikeway guidelines. Parking enforcement staff may be unfamiliar with laws related to parking in bike lanes, while building code enforcement staff may know nothing about local requirements for bicycle parking as part of building construction. In collaboration with local governments, MTC proposes to sponsor an ongoing series of training sessions about useful topics and support participation in existing training courses offered by the Association of Pedestrian and Bicycle Professionals, the University of California at Berkeley, and others. Topics may be derived from formal documents, e.g. *AASHTO Guide to Bicycle Facilities*, or will be developed by experts.

MTC and the Regional Bicycle Working Group (RBWG) will gather and share technical resources, such as information about transportation systems like video detection, automatic lane reconfigurations, and advanced traffic information systems.

In addition to the efforts discussed above, MTC encourages the counties and local jurisdictions to submit funding applications for education efforts through the TDA program, and will offer support for grant funding applications. However, MTC does not propose to undertake or fund projects that would otherwise be funded through the California Safe Routes to School Program.

Regional Bikeway Signing

In the process of developing this plan, MTC has discussed and researched bikeway signing systems. Just as signage is essential for motorized transportation, bicycle travel also benefits from uniform sign placement and design. Bicyclists are typically expected to abide by the same signs and markings as motorists, although there are some signs that are designed specifically for bicycle use. In California, mandatory uniform bicycle signage, their placement, and pavement markings are described in Chapter 1000 in Caltrans' *Highway Design Manual* and the Caltrans *Traffic Manual*. Uniform signage and stenciling for bicycle lanes, routes, and shared-use pathways are in use in locations throughout the Bay Area. However, distinctive signage not required by Caltrans also may be utilized to denote specific regional or primary routes and increase the visibility of bicycle facilities.



Directional signage in Contra Costa County

Many jurisdictions in the Bay Area have devised their own bike route signage and numbering system. San Francisco, Oakland, Emeryville, and a few other cities have implemented a numbered bike route sign system, while Alameda and San Mateo counties have approved a route numbering and signage program in their bicycle master plans. Some agencies have adopted named rather than numbered routes, such as Marin County's "North-South Bikeway."

MTC has no authority over county and local signing. Additionally, it should be noted that:

1. Most county bike plans propose a countywide bike route numbering or naming system that is sufficient for the vast majority of bicycle trips.
2. Jurisdictions such as San Francisco have already expended substantial resources on their numbered sign system.
3. For areas with a high number of intercounty bike trips, such as Alameda and Contra Costa counties, bicyclists seem to be able to discern the change in designation between counties, especially where an effort was made to inform bicyclists of this change.

Based on these findings, MTC does not propose that a regional bikeway sign replace the local and county signs, but will continue to support the development of countywide sign systems on the regional bikeway system both for directional, advisory, and warning purposes. MTC will encourage funding applications for signage, and the RBWG will help coordinate intercounty signage consistency.



Solano County
bike route logo

REGIONAL BICYCLE NETWORK FINANCIAL PLAN

Additional resources to implement the Regional Bicycle Network and many of the recommended support activities are discussed in this chapter. Funding is limited and transportation needs throughout the region far outweigh available resources. Some of the projects and programs identified in this plan will be funded with identified revenues from the financially constrained Track 1 portion of the *Regional Transportation Plan (RTP)*. Most of the remaining projects in the bicycle plan will need to be funded with new, as yet unidentified, revenue sources that comprise the Blueprint portion of the RTP.

ELIGIBLE REGIONAL BICYCLE NETWORK PROJECTS

The projects discussed in the previous chapter are either bikeway projects or support programs. These two broad categories include a wealth of valuable projects and ideas, many worthy of funding. Many local project sponsors may be unaware that bicycle education and safety programs, as well as studies and alternative facilities, can be funded through one of the many different funding sources available to bicycle planners and project managers.

The following list describes the range of projects and programs that are eligible for regional funding. Eligible activities include planning, preliminary engineering, public process, design, and construction.

1. Bikeway/Gap Closure Projects
 - a. Class I shared-use paths
 - b. Class II bike lanes
 - c. Other on-street bikeways and traffic calming
 - d. Signing and stenciling
 - e. Regional bridge projects
 - f. Freeway and highway interchanges
 - g. Feasibility studies
 - h. Substandard railroad crossings

- i. Upgrades to existing bikeways, including loop detector signal upgrades, pavement rehabilitation on shared-use paths, etc.
- 2. Bicycle Support Projects
 - a. Bicycle parking and storage
 - b. Attended bicycle parking facilities
 - c. Changing and shower facilities
 - d. Commercial-area bicycle parking
 - e. Special-event bicycle parking

3. School Commute Projects
 - a. Local school bikeway improvements
 - b. School access and drop-off-area improvements
 - c. College and university on-campus and access bikeways
 - d. School commute maps
 - e. Signing and stenciling
 - f. School education
4. Bicycle/Transit Projects
 - a. On-board bicycle storage
 - b. Station or terminal bicycle storage
 - c. Transit access projects
5. Education, Information and Marketing
 - a. Motorist education
 - b. Public agency staff training
 - c. Law enforcement
 - d. Bicycle coordinator positions
 - e. Public relations campaigns
 - f. Public service announcements (television, Web sites, radio, billboard)
 - g. Mapping projects
 - h. Brochures and pamphlets

FINANCIAL ANALYSIS

Long-term financial cost and projected funding to complete the regional bikeway system are important components of this plan. The cost estimates will require refinement over time for a variety of reasons: (1) changes in costs as time passes, (2) updated cost assumptions used in the countywide bicycle plans, and (3) changing funding issues. For example, the cost of the San Francisco-Oakland Bay Bridge east span bikeway improvements is not included since it is assumed that it will be included in the cost of the bridge retrofit program. Almost all large-scale bikeway projects identified in local bike plans are based on very preliminary cost estimates.

The total cost of the proposed regional bikeway system and support programs in the Bay Area is estimated at \$672 million (see Table 5.1). The projects shown are only those that need funding assistance to be completed; existing bikeways are not listed. The table shows corridor projects only, and does not include the Bay Bridge bikeway project. The total cost is \$1.2

billion for all bikeways in all *countywide* plans. It is also important to note that, at this point, many projects are identified for which likely cost estimates are not yet available. The cost for full build out will be higher than the \$1.2 billion estimate. Project lists and cost estimates will be modified after the completion of the Contra Costa Countywide Bicycle and Pedestrian Plan and the San Francisco Bicycle Plan.

Table 5.1
COST OF ENTIRE REGIONAL BIKEWAY SYSTEM

	REGIONAL BIKEWAY SYSTEM ¹			SAN FRANCISCO BAY TRAIL ²			REGIONAL BIKEWAY SYSTEM ¹ (\$millions)	TOTAL BIKEWAY SYSTEM ¹ (\$millions)
	EXISTING (miles)	PROPOSED (miles)	TOTAL (miles)	EXISTING (miles)	PROPOSED (miles)	TOTAL (miles)		
Alameda	87.6	225.4	313.0	45.0	96.0	141.0	\$152.7	\$190.0
Contra Costa	138.5	113.1	251.6	5.0	68.0	73.0	\$24.4 ³	\$100.0 ³
Marin	9.6	54.4	64.0	31.0	39.0	70.0	\$27.1	\$48.0
Napa	27.9	51.7	79.6	3.0	32.0	35.0	\$13.0	\$33.0
San Francisco	45.4	36.1	81.5	6.0	11.0	17.0	\$16.7	\$15.0
San	33.0	111.3	144.3	30.0	28.0	58.0	\$42.4	\$60.0
Santa Clara	93.9	90.1	184.0	11.0	33.0	44.0	\$90.0	\$300.0
Solano	41.0	94.6	135.6	56.0	15.0	71.0	\$24.8	\$55.0
Sonoma	28.9	149.2	178.1	3.0	36.0	39.0	\$21.5	\$70.0
State Toll Bridges	7.0	18.0	25.0				\$242.4	\$242.4
Bay Trail								\$59.2 ²
Support Programs							\$20.0	\$20.0
TOTAL	512.8	943.9	1456.7	190	358	548	\$675.0	\$1,192.6

¹ From countywide bike plans

² Miscellaneous projects from Bay Trail Plan and not in county totals

³ Projection based on county cost per mile for type of bike facility

FUNDING

The 2001 Regional Transportation Plan (RTP) identified about \$463 million in committed locally available funds and about \$114 million in regional discretionary Track 1 funds for bicycle projects throughout the region. This totals \$577 million over the next 25 years. The total cost to complete the Regional Bicycle Network is approximately \$675 million and the cost to complete the bikeways in the countywide plans, the Bay Trail, and the bridge projects, including the Regional Bicycle Network, is estimated to be \$1.2 billion.

Given the revenues available, there is a shortfall in the region of a little over \$600 million to complete all the facilities proposed.

The Regional Bicycle Network is a subset of the routes and facilities proposed in the countywide plans and represent a total cost of \$700 million. If all available bicycle funds in the region were directed to the regional network, there would still be shortfall of \$95 million.

It is important to note that MTC has no discretionary control over about \$463 million of the \$577 million of bicycle funding that is identified in the RTP. While MTC does have some discretionary control over the remaining \$114 million, \$85 million in of this amount represents county Track 1 funds committed to bicycle projects that are prioritized by the counties under current MTC programming policies.

Table 5.2
ESTIMATED REVENUES FROM BICYCLE FUNDING SOURCES*

COUNTY	TFCA	BTA	TDA3**	TEA***	ADD'TL SALES TAX	TOTAL
Alameda	\$14.71	\$4.31	\$40.60	\$5.70	\$80.00	\$145.32
Contra Costa	\$10.17	\$2.69	\$21.70	\$3.70		\$38.25
Marin	\$2.49	\$0.89	\$6.10	\$1.10		\$10.58
Napa	\$1.46	\$0.51	\$3.20	\$0.60		\$5.76
San Francisco	\$6.69	\$2.32	\$20.70	\$2.80		\$32.51
San Mateo	\$6.59	\$2.35	\$22.00	\$2.80		\$33.74
Santa Clara	\$16.72	\$5.07	\$63.60	\$6.60	\$12.00	\$103.99
Solano	\$4.89	\$1.29	\$8.40	\$1.80		\$16.38
Sonoma	\$5.31	\$1.56	\$12.00	\$2.10		\$20.98
TIP/STIP						\$60.00
County SubTotal	\$69.01	\$20.99	\$198.30	\$27.20	\$80.00	\$455.51

TLC Regional Program Estimate						\$28.40
TLC County Program Estimate						\$7.60
Committed County Track 1 Funds						\$85.00
Total Funds for Bicycle Programs						\$576.51

TFC/A = Transportation Fund for Clean Air

BTA = Bicycle Transportation Account

TDA3 = Transportation Development Act Article 3 Funds

TEA = Transportation Enhancement Activities – County Shares

TLC = Transportation for Livable Communities

*Revenues in millions (2001\$)

**Available for both bicycle and pedestrian projects.

***50% of TEA funds go to the counties for disbursement, 50% are distributed through the TLC program.

REGIONAL BICYCLE NETWORK FUNDING APPROACH

It's clear that there are insufficient funds to complete the countywide plans and proposed Regional Bicycle Network. As mentioned above, MTC has some control over about \$114 million of the projected \$577 million available to bicycle projects over the next 25 years, compared to the \$672 million cost to complete the regional network. The question raised by Oversight Committee members and others is: Given that local and regional bicycle project priorities may differ, how much of the funding available should be directed toward the regional bike network?

Some members of the public and the Oversight Committee are asking MTC to direct resources to projects contained in the Regional Bicycle Plan. In an effort to strike a balance among the different opinions, MTC intended to make regional discretionary [federal Surface Transportation Program/Congestion Mitigation and Air Quality Improvement Program (STP/CMAQ)] funds are available only for proposed bicycle projects or programs that support the Regional Bicycle Network.

This approach allows for local project selection, but would limit the use of regional funds to supporting the regional network. Potentially up to \$114 million of regional funds identified for bicycle projects in Track 1 funding could be directed to the Regional Bicycle Network.

There is another development that can help direct funds to bicycle projects and the Regional Bicycle Network. Assembly Constitutional Amendment 4, or Proposition 42, if passed in a statewide March 2002 vote, would permanently dedicate the sales tax on gasoline for transportation programs. Prop. 42 specifies that 40 percent of the funds go back to cities and counties to be spent on streets and roads repair, 20 percent be spent on mass transit, and the remaining 40 percent be spent on projects funded through the State Transportation Improvement Program (STIP). MTC estimates that about \$5.8 billion in new funding would be available to the Bay Area, with \$2.1 billion available for streets and roads repair, \$1.1 billion available for transit and \$2.6 available through the STIP.

The STIP fund augmentation provided by Prop. 42 would provide new funding that could be available to regional bike projects. About \$600 million of the \$2.6 billion projected available to the region through the STIP are discretionary funds allocated by the California Transportation Commission (CTC) for projects that serve interregional travel and would not be available for bike projects. MTC would allocate the remaining \$2 billion back to counties by a formula based on local priorities. MTC will encourage the use of local STIP funds to support the Regional Bicycle Network.

It is important to point out that there is an unknown amount of highway funding spent on bicycle projects that are routinely incorporated into road improvement or routine repaving projects that may stripe Class 2 bike lane (e.g., road or overcrossing widenings that include bike lanes). MTC will continue to encourage the inclusion of bike facilities into road improvements as appropriate.